Attract a Fish

Background: Review Chapters 2: Fishing Equipment, 4: Fishing Techniques, 5: Fish Identification and Life History and 6: Fish Anatomy in Going Fishing

Standards:

Duration: Part 1: 30-45 minutes; Part 2: 30-45 minutes

Materials: Fish anatomy poster, Fish of Nebraska book, printed images of: catfish, bluegill, crappie and bass (pgs. 3-6), printed identification and habitat cards (pgs. 7-10), fishing catalogs OR tackle box display available from the Youth Fishing Program, Nebraska Fishing Guide

Objectives: Participants will identify four Nebraska sport fish species, describe habitat preferences and identify appropriate bait and fishing techniques.

Preparation:

You may choose to divide your class into groups for this activity. For each group, print a copy of the fish images and print and fold a set of identification cards. The cards should be folded in quarters so that the identifying characteristics are on the front of the card and the fish's name and behavorial characteristics are inside the card. Tape the cards closed and instruct students not to open the cards. (KEY: Species #1 = bluegill, Species #2 = black crappie, Species #3 = channel catfish, Species #4 = largemouth bass)

Warm up: Discuss why it is important to know about the fish you want to catch before you go fishing.

Activity:

Part I:

Using the characteristics listed on the front of the ID cards, have each group of students match the cards to the appropriate fish image. Once all cards have been matched and before opening the cards to check their answers, start a discussion with the students about what they expect each fish to eat and what habitats the fish might occupy. Use cues like the shape of the fish, the coloration & patterns, and the shape of the mouth to inform your guesses. Record student's observations on a whiteboard. Once the discussion wraps up, open the cards to check your answers. Discuss the habitat and diet information on the cards.

Part 2:

Using the fishing catalogs and/or the Youth Fishing Program tackle box, select an appropriate bait or lure to use for each species. Discuss fishing techniques for each species. The habitat and diet information listed on the cards should inform the students' selections. Use the Nebraska Fishing Guide to locate fishing opportunities in your area for each of these species.

Example of questions to guide the discussion:

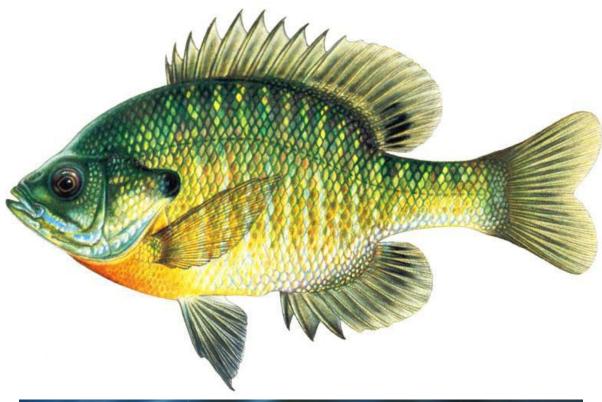
- If you plan to fish for bluegill, what would you look for when you get to the lake?
- Would you fish with or without a bobber to catch a catfish?



- To fish for bluegill, what are some habitats you would look for when you choose a place to cast your line?
- From the Fishing Guide, identify which district you live in.
- From the Fishing Guide, what is the abbreviation for each of the four species?
- From the Fishing Guide, what are some lakes in the district that have all of these species?

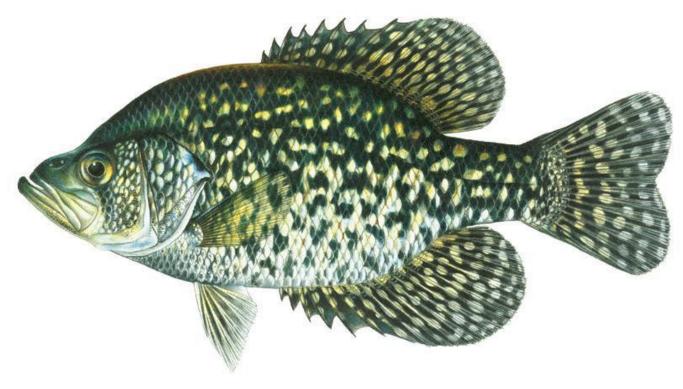
Wrap up: Continue the discussion by asking students to brainstorm other ways to fish for these species. Using the Fish of Nebraska book, identify some other fish species that you could catch with the lures and baits selected for these species.



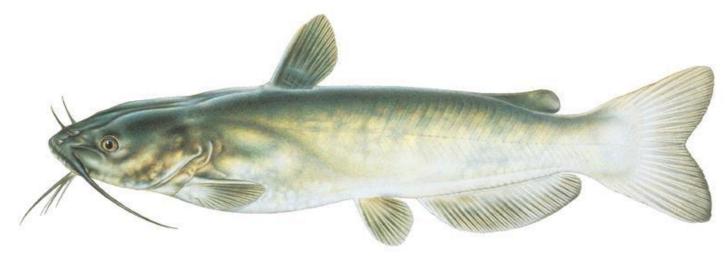






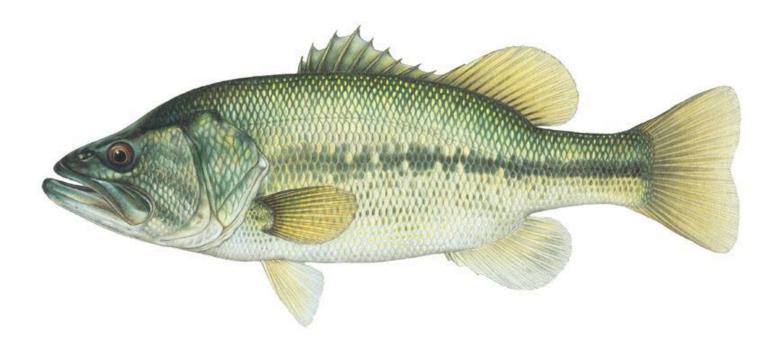




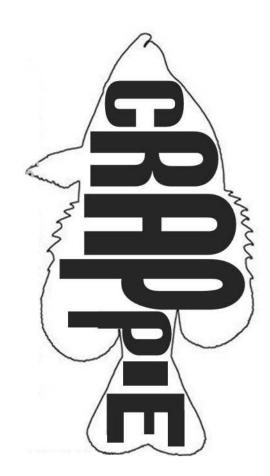












- Deep-bodied, slab-sided
- Large mouth extends to middle of eye, but not beyond eye

Dorsal coloration is dark-olive, with silvery white sides

- Dark markings on sides either arranged in vertical bars or in
 - Spots on anal, dorsal, and tail fins irregular blotches
- Anal-fin is nearly as long as the dorsal fin
- Adults are often larger than 9 inches in Nebraska's reservoirs, and a healthy adult can be well over a foot long.
- A 15 inch fish of this species is considered a "master angler" catch in Nebraska.
- The Nebraska state record weighed in at 4 % lbs.

dentification:

- Habitat:
- Coves with brushpiles

Rocky areas

- Flooded trees During spawning in the spring, adults are found in shallower water
- After spawn, adults can be found in deeper water

Primarily small fish

Activity: young) Also feeds on aquatic insects and crustaceans (especially when

Congregates in loose aggregations about submerged trees, boat

Fairly sedentary

docks, and other cover

- Active feeding in the evening and morning, sometimes near the
- Will feed during the day in deeper water

Identification:

- Slender bodied (body depth is 3 times or more the length of body), streamlined
- Very large gape (mouth extends well past the back of the
 - Dorsal fin almost completely separated into two parts: spiny dorsal and soft dorsal (soft dorsal has only cartilaginous rays and no spines)
 - Dark horizontal stripe on the mid-side of the body
- Dorsal markings are green, lower sides and belly are white
- Adults can grow larger than other sunfishes.
- A 20 inch fish of this species is considered a "master angler" catch in Nebraska.
- The state record fish weighed in at 10 lbs. 11 oz.

Flooded timber

Habitat:

- Brushpiles
- At the edge of underwater ledges and drop-offs into deeper water
- Largemouth bass are sight feeders, and are most successful at finding prey in clear water

Diet:

- Primarily feeds on other fish (piscivorous)
- water or swims and will fit into its mouth Also feeds on crayfish, large insects, frogs, anything that falls in the

- Spends the day in deeper water, lurking about logs, drift piles and other cover
- Moves into the shallows in morning and evening to feed
- Will feed during the day in deeper water

- Smaller fish have black spots on sides
- Olive-brown to slate-blue coloration with white bellies
- Deeply forked tail fin
- Small, fatty tissued adipose fin near the tail fin
- Sensory barbels around the mouth
- Smooth, scaleless skin
- Elongate, slender bodied

<u>Identification:</u>



Habitat:

- Occupies a variety of habitats, but can be located underneath structure (fallen trees, cavities in rock piles)
- Relies on taste rather than sight for feeding, so is tolerant of turbid (murky) water

Diet:

- Diet is varied depending on what is most available, includes fish, insects, crayfish, mollusks, and plant material
- Most food is taken from the bottom
- Will feed on decomposing organic matter (dead fish, dead plants, etc.)

Activity:

- Primarily active at night
- During daylight hours, will hide in natural cavities or remain sedentary in deeper pools.



Identification:

- Deep bodied (body depth is < 3 times the length of the body) Small mouth (mouth does not extend back to the eye)
- Dark spot near the base of the soft dorsal fin
 - Dark spot on the ear flap of the operculum
- Vertical bars on sides of body
- Olive-green with emerald and brassy reflections
 - Breast and belly yellow or reddish orange
- Rarely over 8 inches in Nebraska reservoirs.
- A 10 inch fish is a "master angler" catch in Nebraska.
- The state record weighed in at 2 lbs. 13 oz.

- vegetation also provides cover for bluegill to hide from predators. can support plant life is important to bluegill survival. Submerged Prefers clear water; because a bluegill's primary diet is aquatic insects that are often associated with submerged vegetation, clear water that
- Warm water species
- structures like flooded timber and brushpiles Seeks submerged vegetation and can be found near underwater
- Prefers shallow water habitat where there is light penetration

Diet:

- Aquatic insects and aquatic nymphs of terrestrial insects (example: caddisfly, dragonfly, mayfly, damselfly)
- Also will prey on small fish, crayfish, snails

Activity:

- Fairly sedentary; sunfish spend much of their time hovering quietly near submerged cover or in the shade of trees
- In mid-day found in deeper water or in shade of trees or docks
- In morning and evening, feeds in shallows
- Feeds by sight by foraging at the surface, mid-water, and the substrate